

General Purpose AC EMI Filter



*Image shown is for illustrative purpose only

Conformance



Technical specifications

Operating voltage	440VAC (P-P)
Current rating	80A - 150A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> P 2121VDC (applicable for general purpose filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°C / -25°C +85°C

Features and benefits

- Filters available in Single stage & double stage.
- All filters provide high attenuation performance.
- Two stage filters designed for noisy application requiring excellent filter performance.
- High reliable
- Easy and fast chassis mountable filter with compact size.
- CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- General purpose filters with low leakage current for safety critical application.
- Various terminal options are available.

Application

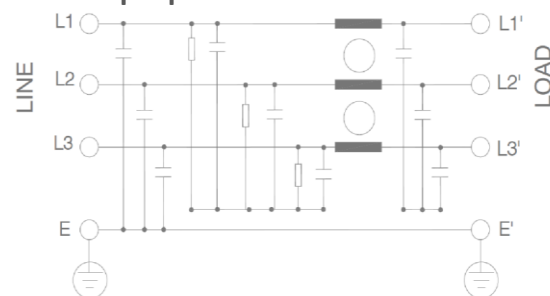
- Defence application
- Industrial application
- Automotive application
- Weighting Machines
- Printing Machinery
- Electrical equipment application
- Office automation equipment

Attenuation type

Single Stage	Standard
Double Stage	High

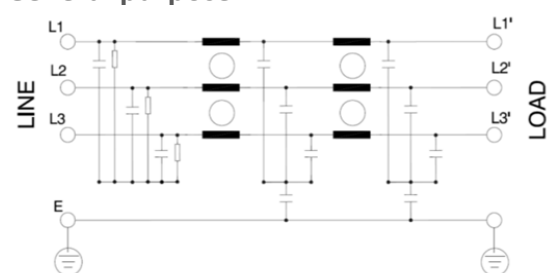
Electrical schematic for Single Stage Filter:

General purpose -



Electrical schematic for double stage filter:

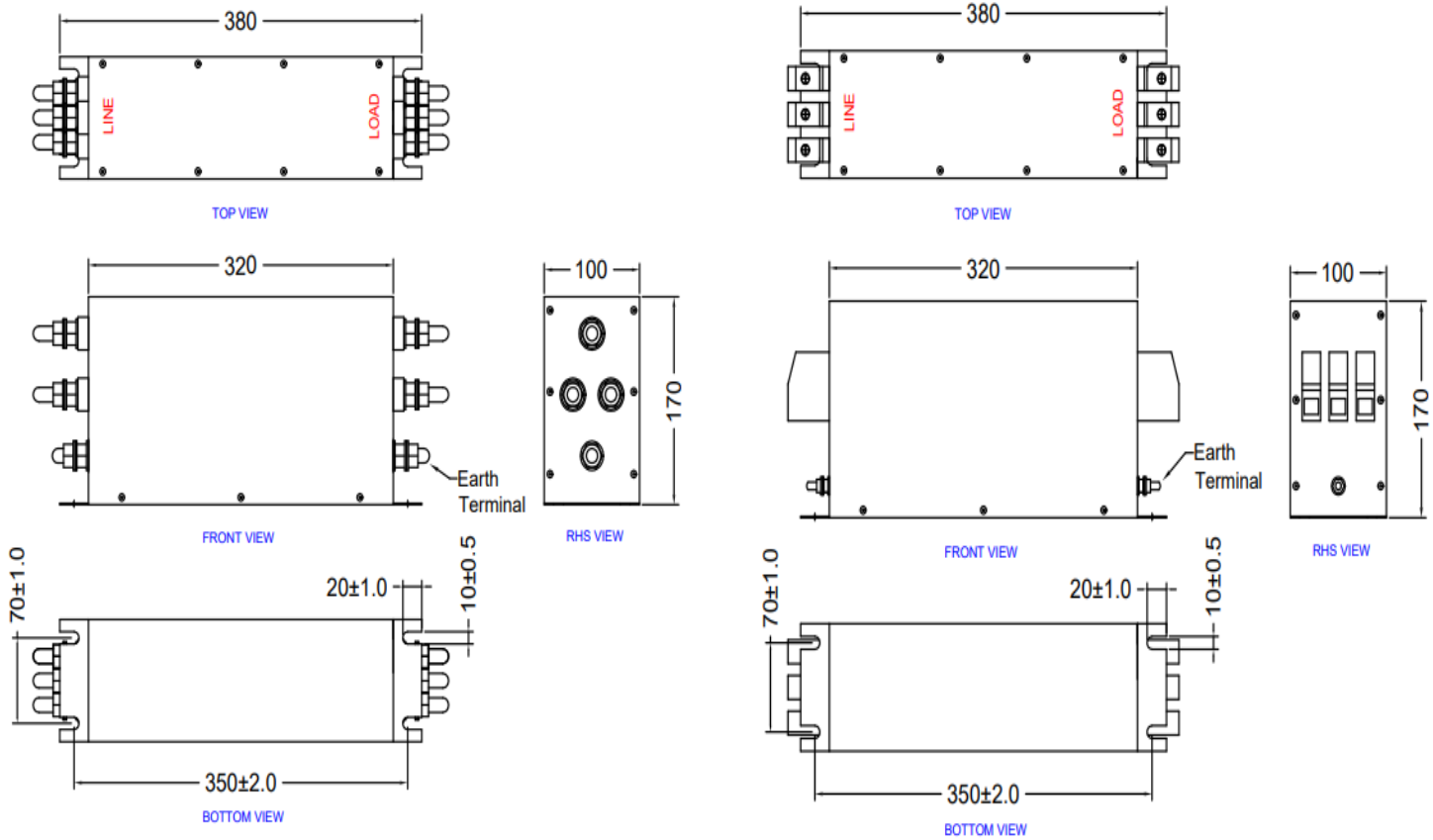
General purpose -



Mechanical Details



screw terminal

touch safe terminal



All dimensions in mm
General tolerance = ±2%

Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°C	Leakage current (mA) @250VAC	Terminals (X)		Approx. Weight (Kg)	Attenuation
				Screw 	Touch safe 		
1	EF-3A080X01G-C55	80	< 3.5	D	F	5	Standard
1	EF-3A100X01G-C55	100	< 3.5	D	F	5	Standard
2	EF-3A120X01G-C55	120	< 3.5	D	F	6	Standard
3	EF-3A150X01G-C55	150	< 3.5	D	F	6	Standard
4	EF-3A080X20G-C55	80	< 3.5	D	F	6	High
5	EF-3A100X20G-C55	100	< 3.5	D	F	6	High
6	EF-3A120X20G-C55	120	< 3.5	D	F	7	High
7	EF-3A150X20G-C55	150	< 3.5	D	F	7	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A080D01G-C55)
- Maximum leakage under usual AC operating conditions (acc. IEC 60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.
- Customize products provided on request.

Connection Method

Current Rating (A)	Screw terminal details		Touch safe terminal details		Earthing screw terminal details
	Screw	Recommended tightening torque	Touch safe	Recommended tightening torque	
80	M8	25-30Kgcm	16 sq.mm.	22-25 lbf.in	M8
100	M10	35-40 Kg Cm	50 sq.mm.	38-40 lbf.in	M10
120	M10	35-40 Kg Cm	50 sq.mm.	38-40 lbf.in	M12
150	M12	35-40 Kg Cm	50 sq.mm.	38-40 lbf.in	M12

Filter attenuation graph

C = Common mode (asymmetrical) —————

D = Differential mode (symmetrical) - - - - -

Graph for filter for single stage

Graph for filter for double stage

